Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

TRANSACTIONS

OF THE

ROYAL IRISH ACADEMY.

VOL. VII.

SCIENCE.

CONTENTS.

I. *ON the Preceſſion of the Equinoxes. By the Rev. Matthew Young, D. D. S. F. T. C. D. and M. R. I. A.* - - - Page 3

II. *General Demonſtrations of the Theorems for the Sines and Coſines of Multiple Circular Arcs, and alſo of the Theorems for expreſſing the Powers of Sines and Coſines by the Sines and Coſines of Multiple Arcs; to which is added a Theorem by help whereof the ſame Method may be applied to demonſtrate the Properties of Multiple Hyperbolic Areas. By the Reverend John Brinkley, A. M. Andrews' Profeſſor of Aſtronomy, and M. R. I. A.* - - - - - - 27

III. *Remarks on the Velocity with which Fluids iſſue from Apertures in the Veſſels which contain them. By the Rev. Matthew Young, D. D. S. F. T. C. D. and M. R. I. A.* - - - 53

IV. *A new Method of reſolving Cubic Equations. By Tho. Meredith, A. B. Trinity College, Dublin* - - - - 69

V. *On the Force of Teſtimony in eſtabliſhing Facts contrary to Analogy. By the Rev. Matthew Young, D. D. S. F. T. C. D. and M. R. I. A.* - - - - - - 79

VI. *On the Number of the Primitive Colorific Rays in Solar Light. By the Rev. Matthew Young, D. D. S. F. T. C. D. and M. R. I. A.* - 119

VII. *Obſervations on the Theory of Electric Attraction and Repulſion. By the Rev. George Miller, D. D. F. T. C. D. and M. R. I. A.* - 139

VIII. *A general*

CONTENTS.

VIII. *A general Demonſtration of the Property of the Circle diſcovered by Mr. Cotes, deduced from the Circle only. By the Reverend John Brinkley, A. M. Andrews' Profeſſor of Aſtronomy, and M. R. I. A.* - - - - - Page 151

IX. *Additional Obſervations on the Proportion of Real Acid in the Three Antient known Mineral Acids, and on the Ingredients in various Neutral Salts and other Compounds. By Richard Kirwan, Eſq. L. L. D. F. R. S. and M. R. I. A.* - - - - 163

X. *Eſſay on Human Liberty. By Richard Kirwan, Eſq. L. L. D. F. R. S. and M. R. I. A.* - - - - - 305

XI. *Synoptical View of the State of the Weather at Dublin in the Year* 1798. *By Richard Kirwan, Eſq. L. L. D. F. R. S. and M. R. I. A.* - 316

XII. *An Abſtract of Obſervations of the Weather of* 1798, *made by Henry Edgeworth, Eſq; at Edgeworthſtown in the County of Longford in Ireland* - - - - - 317

XIII. *A Method of expreſſing, when poſſible, the Value of one variable Quantity in integral Powers of another and conſtant Quantities, having given Equations expreſſing the Relation of theſe variable Quantities. In which is contained the general Doctrine of Reverſion of Series, of approximating to the Roots of Equations, and of the Solution of fluxional Equations by Series. By the Rev. John Brinkley, A. M. Andrews' Profeſſor of Aſtronomy, and M. R. I. A.* - 321

XIV. *Account of the Weather at Londonderry in the Year* 1799. *By William Paterſon, M. D. and M. R. I. A.* - - 357

XV. *Synoptical View of the State of the Weather at Dublin in the Year* 1799. *By Richard Kirwan, Eſq. L. L. D. Preſ. R. I. A. and F. R. S.* - 359

POLITE LITERATURE.

XVI. *Some Obſervations upon the Greek Accents. By Arthur Browne, Eſq; Senior Fellow of Trinity College, Dublin* - - - 359

SCIENCE.

POLITE LITERATURE.